

State Health Department Success Stories in Antibiotic Stewardship

Arkansas Convenes Antibiotic Stewardship Collaborative

Background



The Arkansas Department of Health (ADH) worked closely with the Arkansas Association of Health-System Pharmacists (AAHP) and the Arkansas Hospital Association (AHA) to convene a pharmacist-led collaborative for antibiotic

stewardship. Pharmacists play many key roles in Arkansas healthcare facilities and were an ideal group to engage for stewardship as the state is lacking infectious disease (ID)-trained physicians in each facility. Additionally, pharmacists play a key leadership role and can identify antibiotic usage issues on a facility-level in addition to a patient-level.

This collaborative was designed to bring together stakeholders, such as pharmacists, physician champions, nurses, and infection control practitioners, to share best practices and training on antibiotic stewardship implementation. Objectives for this collaborative were to present content and expert knowledge on implementing an antibiotic stewardship program; provide technical assistance, best practices, and other resources through supporting partners in the statewide initiative; provide feedback on progress and data comparisons to others participating in the collaborative; and assess and mitigate challenges to implementing a stewardship program.

What Was Done



In 2015, the Pharmacist-Led Collaborative for Antimicrobial Stewardship conducted three one-day meetings, bringing together about 65 partners such as hospital pharmacists, pharmacy residents, physician champions, infection control

practitioners, nurses, statisticians, information technologists, and patient leaders, with the goal of increasing and sharing knowledge about antibiotic stewardship. Subject matter experts presented on stewardship program implementation, antibiotic use data and measurement, and strategies to overcome barriers to change. In addition, several hospitals shared their stories on implementing antibiotic stewardship during these in-person meetings.

This collaboration created a shared learning community where 22 hospitals have committed to collaborate and share data. Sharing was facilitated using a previously vetted method utilized with serious adverse event reporting. ADH did not have access to individual information so data from each hospital was kept confidential by sharing and presenting aggregate data. Data shared included a report of baseline data and monthly data on the following:

- Days of therapy per 1,000 patient days on an antibiotic category chosen by the hospital.
- Monthly antibiotic costs for inpatient therapy for the hospital on the chosen antibiotic category identified above.
- Sampled compliance to a protocol for antibiotic therapy for a given condition chosen by the hospital, e.g., pneumonia, urinary tract infection (UTI), skin and soft tissue infection by June 1, 2015.

Hospitals that have not officially signed on are still able to attend the in-person meetings and monthly coaching calls that are a part of the collaborative. The calls are led primarily by the AHA with various subject matter experts brought on to discuss a particular point or topic. Each call had an open discussion portion which allows for questions, discussions, and updates. AHA primarily did the coaching regarding the data submitted.

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How It Was Accomplished



The Pharmacist-Led Collaborative for Antimicrobial Stewardship is co-sponsored by AAHP and AHA and provides these sessions to participants at no charge. Continuing education credits are also provided. The ADH signed on as

a partner in 2014 and has aided as a supporting organization. The ADH provides content for the day-long meetings, facilitates discussions on data collection, participates on monthly coordinating calls, provides and connects participants with resources, and attends all of the in-person meetings.

Impact



The collaborative is responsible for increased recognition and implementation of stewardship practices, increased access to pharmacy data for stewardship purposes, and the development of a network of pharmacists working on this topic to

share best practices. Additionally, after analyzing the 2014 and 2015 National Healthcare Safety Network (NHSN) annual facility surveys, which include questions regarding antibiotic stewardship activities, ADH found that 17 facilities in Arkansas increased their core activities by at least one between those two years.

There have been many lessons learned from this project. First, pharmacists are important to establishing antibiotic stewardship programs, especially in a small, rural state. Additionally, data collection needs and challenges should be addressed at the beginning of a collaborative (i.e., picking which method to use) so that data can be analyzed consistently over time. Finding energetic and passionate professionals for this topic is essential to starting the collaborative, and while additional resources will be found over time, commitment is needed from the beginning. Finally, behavior change and microbiology concepts were areas that needed additional focus and training.